Amendments to the Claims:

Please amend claims 1, 11, 20, 31, 32, 34, 35 and 42, add claims 47-90, and cancel claims 43-46. Following is a complete listing of the claims pending in the application, as amended:

1. (Currently amended) An apparatus for processing a microelectronic workpiece, the apparatus comprising:

a workpiece support configured to hold the microelectronic workpiece;

a processing container configured to receive the microelectronic workpiece held by the workpiece support;

a drive mechanism connected to drive at least one of the processing container and the workpiece support holding the microelectronic workpiece relative to the other so that the microelectronic workpiece may be moved to a plurality of workpiece processing positions;

a first chemical delivery system providing at least one processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in a first one of the plurality of workpiece processing positions;

a first chemical collector system configured to assist in at least partially removing spent processing fluid provided by the first chemical delivery system while the microelectronic workpiece is in the first one of the plurality of workpiece processing positions;

a second chemical delivery system providing at least one processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in a second one of the plurality of microelectronic workpiece processing positions, the second chemical delivery system directing a spray of processing fluid for initial contact with the microelectronic workpiece at an initial radial position;

a second chemical collector system configured to assist in at least partially removing spent processing fluid provided by the second chemical delivery

system from the processing container while the microelectronic workpiece is in the second one of the plurality of microelectronic workpiece processing positions; and

a control system operatively coupled to the drive mechanism and being programmed with instructions that~~configured to~~ direct the drive mechanism to move the workpiece support during application of the spray from the second chemical delivery system so as to vary the radial position of the initial contact between the spray and the microelectronic workpiece.

2. (Previously presented) The apparatus of claim 1, further comprising a rotor drive connected to spin the workpiece support.

3. (Previously presented) The apparatus of claim 1 wherein the first one of the plurality of workpiece processing positions is at a first level within the processing container and the second one of the plurality of workpiece processing positions is at a second level within the processing container, the second level being above the first level.

4. (Previously presented) The apparatus of claim 1 wherein the first chemical collector system is disposed at a level of the processing container corresponding to the first one of the plurality of workplace processing positions and the second chemical collector system is disposed at a different level of the processing container that corresponds to the second one of the plurality of workplace processing positions.

5. (Previously presented) The apparatus of claim 1 wherein the second chemical collector system collects spent processing fluid as the spent processing fluid is flung from the microelectronic workpiece during spinning of the microelectronic workpiece.

6. (Previously presented) The apparatus of claim 1 wherein the second chemical collector system comprises:

a splash wall extending about the interior periphery of the processing container;

a further wall extending about the interior periphery of the processing container;

the splash wall and further wall defining a collection channel therebetween for collecting the spent processing fluid of the second chemical delivery system.

7. (Previously presented) The apparatus of claim 6, further comprising a fluid outlet proceeding from the collection channel.

8. (Previously presented) The apparatus of claim 1 wherein the second chemical delivery system is configured to direct a spray of processing fluid that initially impinges on less than an entire radius of the microelectronic workpiece.

9. (Cancelled)

10. (Previously presented) The apparatus of claim 1 wherein the second chemical delivery system directs a stream of the at least one processing fluid toward a fixed location.

11. (Currently amended) An apparatus for processing a microelectronic workpiece, the apparatus comprising:

a workpiece support configured to hold the microelectronic workpiece;

a processing container configured to receive the microelectronic workpiece held by the workpiece support;

an automated drive system connected to drive at least one of the processing container and the workpiece support holding the microelectronic workpiece relative to the other so that the microelectronic workpiece is

moved between an initial processing position and a secondary processing position;

a chemical delivery system providing at least one stream of at least one processing fluid to the processing container for application to at least one surface of the microelectronic workpiece as the microelectronic workpiece proceeds between the initial processing position and secondary processing position, the at least one stream being directed toward a first portion of the at least one surface of the microelectronic workpiece when the microelectronic workpiece is in the initial processing position, the at least one stream being directed toward a second portion of the at least one surface of the microelectronic workpiece disposed radially outwardly from the first portion, when the microelectronic workpiece is in the secondary processing position; and

a control system operatively coupled to the automated drive system and programmed with instructions thatto direct the drive system to move the workpiece support while the chemical delivery system directs the at least one stream toward the microelectronic workpiece.

12. (Previously presented) The apparatus of claim 11 wherein the automated drive system includes a linear actuator that drives at least one of the processing container and the workpiece support relative to the other along a vertically oriented drive path.

13. (Previously presented) The apparatus of claim 11 wherein the automated drive system includes a rotational actuator that drives at least one of the processing container and the workpiece support relative to the other along an angular drive path.

14. (Previously presented) The apparatus of claim 11, further comprising a chemical collector system configured to remove spent processing fluid provided by the

chemical delivery system as the microelectronic workpiece proceeds between the initial processing position and the secondary processing position.

15. (Previously presented) The apparatus of claim 14, further comprising:

a further chemical delivery system configured to provide at least one processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in a further processing position other than a position between the initial and secondary processing positions; and

a further chemical collector system configured to assist in at least partially removing spent processing fluid provided by the further chemical delivery system from the processing container while the microelectronic workpiece is in the further workpiece processing position.

16. (Previously presented) The apparatus of claim 14 wherein the chemical collector system comprises:

a splash wall extending about the interior periphery of the processing container;

a further wall extending about the interior periphery of the processing container;

the splash wall and further wall defining a collection channel therebetween for collecting the spent processing fluid of the further chemical delivery system.

17. (Previously presented) The apparatus of claim 11, further comprising a rotor drive connected to spin the workpiece support and corresponding microelectronic workpiece as the microelectronic workpiece proceeds from the initial processing position to the secondary processing position.

18. (Previously presented) The apparatus of claim 11, wherein the chemical delivery system is configured to direct a stream of processing fluid that initially impinges on less than an entire radius of the microelectronic workpiece.

19. (Cancelled)

20. (Currently amended) An apparatus for processing a microelectronic workpiece, the apparatus comprising:

a workpiece support configured to hold the microelectronic workpiece;

a processing container configured to receive the microelectronic workpiece held by the workpiece support, the processing container being configured for immersion processing of at least one surface of the microelectronic workpiece at a first processing portion of the processing container, and configured for spray processing the at least one surface of the microelectronic workpiece at a second processing portion of the processing container;

a drive mechanism connected to drive at least one of the processing container and the workpiece support holding the microelectronic workpiece relative to the other so that the microelectronic workpiece may be moved to a plurality of workpiece processing positions, the plurality of workpiece processing positions including at least an immersion processing position proximate the first portion of the processing container and a spray processing position proximate the second portion of the processing container;

a first chemical delivery system configured to provide at least one processing fluid to the processing container for immersion processing of the at least one surface of the microelectronic workpiece when the microelectronic workpiece is at the immersion processing position;

a first chemical collector system configured to assist in at least partially removing spent processing fluid provided by the first chemical delivery system while the microelectronic workpiece is at the immersion processing position;

a second chemical delivery system configured to provide at least one processing fluid to the processing container for spray processing of the at least one surface of the microelectronic workpiece when the microelectronic

workpiece is at the spray processing position, the second chemical delivery system being positioned to direct a spray of processing fluid for initial contact with the microelectronic workpiece at an initial radial position;

a second chemical collector system configured to assist in at least partially removing spent processing fluid provided by the second chemical delivery system from the processing container while the microelectronic workpiece is at the spray processing position; and

a control system operatively coupled to the drive mechanism and programmed with instructions that~~configured to~~ direct the drive mechanism to move the workpiece support during application of the spray from the second chemical delivery system so as to vary the radial position of the initial contact between the spray and the microelectronic workpiece.

21. (Previously presented) The apparatus of claim 20 wherein the first processing portion of the processing container is below the second processing portion of the processing container.

22. (Previously presented) The apparatus of claim 20, further comprising a rotor drive connected to spin the workpiece support.

23. (Previously presented) The apparatus of claim 20 wherein the immersion processing position is at a first level within the processing container and the spray processing position is at a second level within the processing container, the second level being above the first level.

24. (Previously presented) The apparatus of claim 20 wherein the second chemical collector system collects spent processing fluid as the spent processing fluid is flung from the microelectronic workpiece during spinning of the microelectronic workpiece.

25. (Previously presented) The apparatus of claim 24 wherein the second chemical collector system comprises:

a splash wall extending about the interior periphery of the processing container;

a further wall extending about the interior periphery of the processing container;

the splash wall and further wall defining a collection channel therebetween for collecting the spent processing fluid of the second chemical delivery system.

26. (Previously presented) The apparatus of claim 25, further comprising a fluid outlet proceeding from the collection channel.

27. (Previously presented) The apparatus of claim 20 wherein the drive mechanism comprises a linear actuator and wherein the control system directs the linear actuator to drive the microelectronic workpiece along a vertically oriented linear drive path between the immersion processing position and the spray processing position.

28. (Previously presented) The apparatus of claim 20 wherein the drive mechanism comprises a rotational actuator and wherein the control system directs the rotational actuator to rotate the microelectronic workpiece along an angular drive path about a fixed rotation axis between the immersion processing position and the spray processing position.

29. (Cancelled)

30. (Cancelled)

31. (Currently amended) The apparatus of claim 39, further comprising:
a fluid collector system; and

a rotor drive connected to spin the workpiece support and corresponding microelectronic workpiece to thereby fling spent processing fluid into the fluid~~chemical~~ collector~~ion~~ system.

32. (Currently amended) The apparatus of claim 39~~31~~, further comprising a ~~chemical~~fluid collector system that includes:

a splash wall extending about the interior periphery of the processing vessel~~container~~;

a further wall extending about the interior periphery of the processing vessel~~container~~;

the splash wall and further wall defining a collection channel therebetween for collecting the spent processing fluid of the fluid~~chemical~~ delivery system.

33. (Previously presented) The apparatus of claim 32, further comprising a fluid outlet proceeding from the collection channel.

34. (Currently amended) The apparatus of claim 42~~39~~ wherein the control system directs the drive system to drive the microelectronic workpiece between an initial spray processing position and a secondary spray processing position as the fluid~~chemical~~ delivery system provides the at least one stream of processing fluid for contact with ~~the~~ at least one surface of the microelectronic workpiece, the at least one fixed stream being directed toward a first portion of the at least one surface of the microelectronic workpiece when the microelectronic workpiece is in the initial spray processing position, the at least one stream being directed toward a second portion of the at least one surface of the microelectronic workpiece disposed radially outwardly from the first position, when the microelectronic workpiece is in the secondary spray processing position.

35. (Currently amended) The apparatus of claim 42~~34~~ wherein the drive system~~mechanism~~ comprises a linear actuator and wherein the control system directs

the linear actuator to drive the microelectronic workpiece along a vertically oriented linear drive path between the initial spray processing position and the secondary spray processing position.

36-38. (Cancelled)

39. (Previously presented) An apparatus for processing a microelectronic workpiece, comprising:

a workpiece support configured to hold a microelectronic workpiece;

a processing vessel configured to receive a microelectronic workpiece held by the workpiece support;

a drive system coupled to the workpiece support to move the workpiece support along a first axis relative to the processing vessel between a first position and a second position, the drive system being configured to tilt the workpiece support relative to the vessel about a second axis generally transverse to the first axis; and

a fluid delivery system positioned to direct at least one stream of processing fluid toward the workpiece support to impinge on a microelectronic workpiece while the workpiece support holds the microelectronic workpiece.

40. (Previously presented) The apparatus of claim 39 wherein the fluid delivery system is positioned to direct processing fluid toward the workpiece support while the workpiece support is in the first position.

41. (Previously presented) The apparatus of claim 39 wherein the fluid delivery system is positioned to direct processing fluid toward the workpiece support while the workpiece support is in both the first position and the second position.

42. (Currently amended) The apparatus of claim 39, further comprising a control~~central~~ system operatively coupled to the drive system to direct the drive system

to move the workpiece support while the fluid delivery system directs the at least one stream of processing fluid.

43-46. (Cancelled)

47. (New) An apparatus for processing a microelectronic workpiece, comprising:

a workpiece support configured to hold the microelectronic workpiece;

a processing container configured to receive the microelectronic workpiece held by the workpiece support;

a drive mechanism connected to drive at least one of the processing container and the workpiece support relative to the other to move the microelectronic workpiece to at least one processing position;

a fluid delivery system positioned to direct a spray of a processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in the at least one workpiece processing position; and

a collector system positioned to receive at least a portion of the processing fluid directed by the fluid delivery system, the collector system including a first annular channel and a second annular positioned at least proximate to the first annular channel, the first and second annular channels being in fluid communication with each other.

48. (New) The apparatus of claim 47 wherein the first and second annular channels are disposed concentrically about an axis, and wherein the workpiece support is rotatable relative to the container about the axis.

49. (New) The apparatus of claim 47 wherein at least one of the annular channels is bounded by a first wall and a second wall, with at least part of the second wall positioned radially outwardly from the first wall.

50. (New) The apparatus of claim 47 wherein the first annular channel is bounded by a first wall and a second wall, with at least part of the second wall positioned radially outwardly from the first wall, and wherein the second annular channel is bounded by the second wall and a third wall, with at least part of the third wall positioned radially outwardly from the second wall.

51. (New) The apparatus of claim 47 wherein the second channel is positioned above the first channel.

52. (New) The apparatus of claim 47 wherein the first and second annular channels are concentric about an axis and wherein the first channel has a first axial position relative to the axis and the second annular channel has a second axial position relative to the axis, the second axial position being different than the first axial position.

53. (New) The apparatus of claim 47, further comprising a control system operatively coupled to the drive mechanism and programmed to direct the drive mechanism to move the workpiece support during application of the spray from the delivery system so as to vary the radial position of an initial contact between the spray and the microelectronic workpiece.

54. (New) The apparatus of claim 47 wherein the workpiece support is movable relative to the container along an axis to a plurality of processing positions, and wherein at least one of the annular channels is bounded by a first wall and a second wall, with at least part of the second wall disposed radially outwardly from the first wall, and wherein the first and second walls are disposed obliquely relative to the axis.

55. (New) The apparatus of claim 47 wherein the first annular channel and the second annular channel are coupled to at least one outlet.

56. (New) An apparatus for processing a microelectronic workpiece, comprising:

a workpiece support configured to hold the microelectronic workpiece;

a processing container configured to receive the microelectronic workpiece held by the workpiece support;

a drive mechanism connected to drive at least one of the processing container and the workpiece support relative to the other to move the microelectronic workpiece to a plurality of processing positions;

a first fluid delivery system positioned to provide at least one processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in a first one of the plurality of workpiece processing positions;

a first fluid collector system positioned to receive at least a portion of the processing fluid provided by the first fluid delivery system while the microelectronic workpiece is in the first one of the plurality of workpiece processing positions;

a second fluid delivery system positioned to direct a spray of at least one processing fluid to the processing container for application to the microelectronic workpiece when the microelectronic workpiece is in a second one of the plurality of microelectronic workpiece processing positions;

a second fluid collector system positioned to receive at least a portion of the processing fluid directed by the second fluid delivery system while the microelectronic workpiece is in the second one of the plurality of microelectronic workpiece processing positions, the second fluid collector including a first annular channel and a second annular channel positioned at least proximate to the first annular channel, the first and second annular channels being in fluid communication with each other.

57. (New) The apparatus of claim 56 wherein the first and second annular channels are disposed concentrically about an axis, and wherein the workpiece support is rotatable relative to the container about the axis.

58. (New) The apparatus of claim 56 wherein at least one of the annular channels is bounded by a first wall and a second wall, with at least part of the second wall positioned radially outwardly from the first wall.

59. (New) The apparatus of claim 56 wherein the first annular channel is bounded by a first wall and a second wall, with at least part of the second wall positioned radially outwardly from the first wall, and wherein the second annular channel is bounded by the second wall and a third wall, with at least part of the third wall positioned radially outwardly from the second wall.

60. (New) The apparatus of claim 56 wherein the second channel is positioned above the first channel.

61. (New) The apparatus of claim 56 wherein the first and second annular channels are concentric about an axis and wherein the first channel has a first axial position relative to the axis and the second annular channel has a second axial position relative to the axis, the second axial position being different than the first axial position.

62. (New) The apparatus of claim 56, further comprising a control system operatively coupled to the drive mechanism and configured to direct the drive mechanism to move the workpiece support during application of the spray from the second delivery system so as to vary the radial position of an initial contact between the spray and the microelectronic workpiece.

63. (New) The apparatus of claim 56 wherein the workpiece support is movable relative to the container along an axis to a plurality of processing positions, and

wherein at least one of the annular channels is bounded by a first wall and a second wall, with at least part of the second wall disposed radially outwardly from the first wall, and wherein the first and second walls are disposed obliquely relative to the axis.

64. (New) The apparatus of claim 56 wherein the first annular channel and the second annular channel are coupled to at least one outlet.

65. (New) A method for processing a microelectronic workpiece, comprising:

carrying a microelectronic workpiece;

directing a stream of processing fluid toward the microelectronic workpiece to strike the microelectronic workpiece at a first radial location of the microelectronic workpiece; and

moving the microelectronic workpiece relative to the stream of processing fluid so that the stream of processing fluid strikes the microelectronic workpiece at a second radial location different than the first radial location.

66. (New) The method of claim 65 wherein moving the microelectronic workpiece relative to the stream of processing fluid includes moving the microelectronic workpiece along an axis and simultaneously rotating the microelectronic workpiece about the axis.

67. (New) The method of claim 65 wherein moving the microelectronic workpiece includes moving the microelectronic workpiece so that the stream of processing fluid strikes the microelectronic workpiece at a second radial location positioned radially outwardly from the first radial location.

68. (New) The method of claim 65 wherein directing a stream of processing fluid includes directing a stream of rinsing fluid.

69. (New) The method of claim 65 wherein directing a stream of processing fluid includes directing a stream of rinsing fluid after at least partially immersing the microelectronic workpiece in an electrolytic fluid.

70. (New) The method of claim 65, further comprising collecting at least some of the processing fluid in a fluid collector having a first annular channel and a second annular channel positioned at least proximate to and in fluid communication with the first annular channel.

71. (New) The method of claim 65, further comprising collecting at least some of the processing fluid in a fluid collector having a first annular channel and a second annular channel positioned at least proximate to and in fluid communication with the first annular channel, and wherein moving the microelectronic workpiece includes moving the microelectronic workpiece so that the stream of processing fluid reflecting from the microelectronic workpiece moves from the first annular channel to the second annular channel.

72. (New) The method of claim 65, further comprising:

at least partially immersing the microelectronic workpiece in an electrochemical bath prior to directing the stream of processing fluid;

moving the microelectronic workpiece along an axis and away from the bath to a first axial location and spinning the microelectronic workpiece about the axis to return fluid to the electrochemical bath; and

moving the microelectronic workpiece away from the bath and the first axial location to a second axial location prior to directing the stream of processing fluid.

73. (New) A method for processing a microelectronic workpiece, comprising:

carrying a microelectronic workpiece;

tilting the microelectronic workpiece to change an angle between a face of the microelectronic workpiece and a fluid stream orifice; and

directing a stream of processing fluid from the fluid stream orifice toward the microelectronic workpiece to strike the microelectronic workpiece.

74. (New) The method of claim 73, further comprising rotating the microelectronic workpiece about an axis while directing the stream of processing fluid.

75. (New) The method of claim 73, further comprising rotating the microelectronic workpiece about an axis and moving the microelectronic workpiece along the axis while directing the stream of processing fluid.

76. (New) The method of claim 73 wherein directing a stream of processing fluid includes directing a stream of rinsing fluid.

77. (New) The method of claim 73 wherein moving the microelectronic workpiece includes moving the microelectronic workpiece so that the stream of processing fluid strikes the microelectronic workpiece at a second radial location positioned radially outwardly from the first radial location.

78. (New) The method of claim 73 wherein directing a stream of processing fluid includes directing a stream of rinsing fluid.

79. (New) The method of claim 73 wherein directing a stream of processing fluid includes directing a stream of rinsing fluid after at least partially immersing the microelectronic workpiece in an electrochemical fluid.

80. (New) The method of claim 73, further comprising collecting at least some of the processing fluid in a fluid collector having a first annular channel and a second

annular channel positioned at least proximate to and in fluid communication with the first annular channel.

81. The method of claim 73, further comprising collecting at least some of the processing fluid in a fluid collector having a first annular channel and a second annular channel positioned at least proximate to and in fluid communication with the first annular channel, and wherein moving the microelectronic workpiece includes moving the microelectronic workpiece so that the stream of processing fluid reflecting from the microelectronic workpiece moves from the first annular channel to the second annular channel.

82. (New) The method of claim 73, further comprising:

at least partially immersing the microelectronic workpiece in an electrochemical bath prior to directing the stream of processing fluid;

moving the microelectronic workpiece along an axis and away from the bath to a first axial location and spinning the microelectronic workpiece about the axis to return fluid to the electrochemical bath; and

moving the microelectronic workpiece away from the bath and the first axial location to a second axial location prior to directing the stream of processing fluid.

83. (New) A method for processing a microelectronic workpiece, comprising:

carrying the microelectronic workpiece;

placing the microelectronic workpiece in contact with at least one electrical contact;

electrochemically applying material to the microelectronic workpiece by applying an electrical potential to the at least one electrical contact while the microelectronic workpiece is in fluid communication with an electrochemical processing fluid;

releasing the microelectronic workpiece from the at least one electrical contact; and

cleaning the at least one electrical contact by directing a stream of rinsing fluid at the at least one electrical contact while the at least one electrical contact is spaced apart from the microelectronic workpiece.

84. (New) The method of claim 83 wherein cleaning the at least one electrical contact includes rotating the at least one electrical contact while directing the stream of rinsing fluid.

85. (New) The method of claim 83 wherein directing a stream of rinsing fluid includes directing a stream of rinsing fluid after at least partially immersing the microelectronic workpiece in an electrolytic fluid.

86. (New) The method of claim 83, further comprising collecting at least some of the rinsing fluid in a fluid collector having a first annular channel and a second annular channel positioned at least proximate to and in fluid communication with the first annular channel.

87. (New) The method of claim 83, further comprising:

at least partially immersing the microelectronic workpiece in an electrochemical bath prior to directing the stream of rinsing fluid;

moving the microelectronic workpiece along an axis and away from the bath to a first axial location and spinning the microelectronic workpiece about the axis to return fluid to the electrochemical bath; and

moving the microelectronic workpiece away from the bath and the first axial location to a second axial location prior to releasing the microelectronic workpiece and directing the stream of rinsing fluid.

88. (New) An apparatus for processing microelectronic workpieces, formed by a process, comprising:

positioning a workpiece support at least proximate to a container, the container being configured to receive a processing fluid for processing a microelectronic workpiece;

positioning a nozzle at least proximate to the container, the nozzle being configured to direct a stream of processing fluid toward the workpiece support;

coupling an actuator to at least one of the workpiece support and the container;

coupling a programmable controller to the actuator; and

programming the programmable controller to move the at least one of the workpiece support and the container relative to the other to increase and decrease a distance between the workpiece support and the nozzle while the nozzle directs a stream of processing fluid toward the workpiece support.

89. (New) The method of claim 88 wherein programming the programmable controller includes programming the programmable controller to move the at least one of the workpiece support and the container relative to the other along an axis while the workpiece support spins about the axis.

90. (New) The method of claim 88 wherein programming the programmable controller includes programming the programmable controller to move the workpiece support relative to the nozzle along an axis.